

## Freeform Search

---

	US Pre-Grant Publication Full-Text Database
	US Patents Full-Text Database
	US OCR Full-Text Database
<b>Database:</b>	EPO Abstracts Database
	JPO Abstracts Database
	Derwent World Patents Index
	IBM Technical Disclosure Bulletins

Term:

Display:  Documents in Display Format:  Starting with Number

Generate:  Hit List  Hit Count  Side by Side  Image

---

---

### Search History

---

DATE: Monday, October 30, 2006    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ*

<u>L4</u>	L3 and displace\$4	28	<u>L4</u>
-----------	--------------------	----	-----------

<u>L3</u>	primer\$1 near5 random near5 (constant or homologous)	65	<u>L3</u>
-----------	---	----	-----------

*DB=USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ*

<u>L2</u>	L1 and strand displace\$4	7	<u>L2</u>
-----------	---------------------------	---	-----------

<u>L1</u>	primer\$1 near5 random near5 (constant or homologous)	26	<u>L1</u>
-----------	---	----	-----------

END OF SEARCH HISTORY

```
s random (10a) primer#(10a) (constant sequence# or identical sequence#)
L1          0 RANDOM (10A) PRIMER#(10A) (CONSTANT SEQUENCE# OR IDENTICAL SEQUEN
CE#)

=> s (primer# or oligonucleotide#)(10a)random (10a)(constant or identical)
L2          32 (PRIMER# OR OLIGONUCLEOTIDE#)(10A) RANDOM (10A)(CONSTANT OR
IDENTICAL)

=> s l2 and (amplif##### or PCR or exten####)
L3          25 L2 AND (AMPLIF##### OR PCR OR EXTEN####)

=> s l3 and (strand (10a)displace####)
L4          0 L3 AND (STRAND (10A) DISPLACE####)

=> s l3 and displac#####
L5          0 L3 AND DISPLAC####

=> dup rem l3
PROCESSING COMPLETED FOR L3
L6          13 DUP REM L3 (12 DUPLICATES REMOVED)

=> d 1-13 bib ab kwic
'L-13' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d L6 1-13 bib ab kwic

L6  ANSWER 1 OF 13 CAPPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AN  2005:643920 CAPPLUS
DN  144:267979
TI  Mutation of hepatitis B virus detected by hybridization in oligonucleotide
array
AU  Lu, Yanqin; Han, Jinxiang; Huang, Haiyan; Zhu, Bo
CS  Key Laboratory for Bio-tech Drugs Ministry of Health, Shandong Medicinal
Biotechnology Center, Jinan, 250062, Peop. Rep. China
SO  Zhonghua Weishengwuxue He Mianyixue Zazhi (2004), 24(4), 324-327
CODEN: ZWMZDP; ISSN: 0254-5101
PB  Beijing Shengwu Zhipin Yanjiuso
DT  Journal
LA  Chinese
AB  12 Mutation sites located in S, pre-C, X and P region of hepatitis B virus
genome were detected. 12 Pairs of oligonucleotide probes were designed in
the antisense strand with amino linker and poly T15 spacer at their 5
terminal, the length of which was 14-18bp. Synthesized probes were
immobilized on aldehyde modified glass slides. One pair of PCR
primers was used for amplification of the part of S, P region
which contained 5 mutation sites and the other pair of primers for
fragment of X and pre-C region which contained 7 mutation sites. Both of
upper primers were fluorescence labeled at their 5 terminal.
Single-strand fluorescence marked DNA acquired by asym. PCR was
hybridized to oligonucleotide array and signal intensities were collected
after scanning. Among 12 pos. serum samples, no mutation was detected in
surface antigen. While in pre-core and core region, T1752-A1764 mutant
was observed in 2 specimens and A1896 mutant found in 3 specimens, 1 sample
was tested to hold T1762-A1764 and A1896 simultaneously and no mutant was
identified in other 6 samples. Random DNA sequencing result was
identical to the results of oligonucleotide array.
Oligonucleotide array is a fast method to detect mutations in parallel.
AB  12 Mutation sites located in S, pre-C, X and P region of hepatitis B virus
genome were detected. 12 Pairs of oligonucleotide probes were designed in
```

the antisense strand with amino linker and poly T15 spacer at their 5 terminal, the length of which was 14-18bp. Synthesized probes were immobilized on aldehyde modified glass slides. One pair of PCR primers was used for amplification of the part of S, P region which contained 5 mutation sites and the other pair of primers for fragment of X and pre-C region which contained 7 mutation sites. Both of upper primers were fluorescence labeled at their 5 terminal. Single-strand fluorescence marked DNA acquired by asym. PCR was hybridized to oligonucleotide array and signal intensities were collected after scanning. Among 12 pos. serum samples, no mutation was detected in surface antigen. While in pre-core and core region, T1752-A1764 mutant was observed in 2 specimens and A1896 mutant found in 3 specimens, 1 sample was tested to hold T1762-A1764 and A1896 simultaneously and no mutant was identified in other 6 samples. Random DNA sequencing result was identical to the results of oligonucleotide array.

Oligonucleotide array is a fast method to detect mutations in parallel.

IT DNA microarray technology  
Hepatitis B virus  
Mutation

PCR (polymerase chain reaction)  
(oligonucleotide array detecting hepatitis B virus mutation)

L6 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2  
AN 2002:704114 CAPLUS  
DN 138:86808  
TI Identification of *Taenia asiatica* in China: molecular, morphological, and epidemiological analysis of a Luzhai isolate  
AU Eom, Keeseon S.; Jeon, Hyung-Kyu; Kong, Yoon; Hwang, Ui Wook; Yang, Yichao; Li, Xueming; Xu, Longqi; Feng, Zheng; Pawlowski, Zbigniew S.; Rim, Han-Jong  
CS Department of Parasitology and Medical Research Institute, Chungbuk National University College of Medicine, Chongju, Chungbuk, 360-763, S. Korea  
SO Journal of Parasitology (2002), 88(4), 758-764  
CODEN: JOPAA2; ISSN: 0022-3395  
PB American Society of Parasitologists  
DT Journal  
LA English  
AB Multiple anal. has characterized a recently described tapeworm of people, *T. asiatica*, in mainland China. Six adult tapeworms collected from people of the Zhuang minority residing in the southern part of China (Luzhai isolate) were comparatively analyzed with other tapeworms from people: *T. asiatica* (South Korea), *T. saginata* (Poland, Korea), and *T. solium* (People's Republic of China). Exptl. infections with eggs from the Luzhai isolate in pigs and cattle produced cysticerci, each with a hookletless scolex and with wartlike formations on the external surface of the bladder wall. There were rostellar protrusions in the scolices of adult worms. Random amplified polymorphic DNA anal. using 3 arbitrary primers produced bands identical to those of the Korean *T. asiatica*. Conversely, *T. saginata* and *T. solium* exhibited different banding patterns. Phylogenetic relationships inferred from the complete nucleotide sequences of the internal transcribed spacer 2 placed the Chinese tapeworms consistently within the *T. asiatica* clade by 96% bootstrapping value in the maximum likelihood anal., 96% in maximum parsimony, and 100% in neighbor joining. These collective data demonstrate that *T. asiatica* is sympatrically distributed with the other 2 species of *Taenia* in the human host in mainland China.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Multiple anal. has characterized a recently described tapeworm of people, *T. asiatica*, in mainland China. Six adult tapeworms collected from people of the Zhuang minority residing in the southern part of China (Luzhai isolate) were comparatively analyzed with other tapeworms from people: *T. asiatica* (South Korea), *T. saginata* (Poland, Korea), and *T. solium*

(People's Republic of China). Exptl. infections with eggs from the Luzhai isolate in pigs and cattle produced cysticerci, each with a hookletless scolex and with wartlike formations on the external surface of the bladder wall. There were rostellar protrusions in the scolices of adult worms. Random amplified polymorphic DNA anal. using 3 arbitrary primers produced bands identical to those of the Korean *T. asiatica*. Conversely, *T. saginata* and *T. solium* exhibited different banding patterns. Phylogenetic relationships inferred from the complete nucleotide sequences of the internal transcribed spacer 2 placed the Chinese tapeworms consistently within the *T. asiatica* clade by 96% bootstrapping value in the maximum likelihood anal., 96% in maximum parsimony, and 100% in neighbor joining. These collective data demonstrate that *T. asiatica* is sympatrically distributed with the other 2 species of *Taenia* in the human host in mainland China.

L6 ANSWER 3 OF 13 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2001:127339 BIOSIS  
DN PREV200100127339  
TI Genetic diversity of *Amblyseius longispinosus* and *A. womersleyi* (Acari: Phytoseiidae) using RAPD analysis.  
AU Yeh, Wen-Bin [Reprint author]; Ho, Chai-Lien; Hui, Cho-Fat; Ho, Chyi-Chen  
CS Department of Biology, Kaohsuing Medical University, 100 Shih-Chuan 1st Rd,  
Kaoshiung, 807, Taiwan  
wbyeh@cc.kmu.edu.tw  
SO Zhonghua Kunchong, (December, 2000) Vol. 20, No. 4, pp. 335-345. print.  
ISSN: 0258-462X.  
DT Article  
LA Chinese  
ED Entered STN: 14 Mar 2001  
Last Updated on STN: 15 Feb 2002  
AB Predatory mites of *Amblyseius longispinosus* and *A. womersleyi* are used to control spider mites. It has been considered that *A. womerslei* is a synonym of *A. longispinosus* since their identification character (dorsal setae L8) with intermediate length has been found. Random amplified polymorphic DNA (RAPD) was used to analysis the genetic diversity of these two morphologically similar mites. Genomic DNAs were extracted separately from egg, nymph, and adult either from *A. longispinosus* or *A. womersleyi*, respectively. The optimal reaction condition including the buffer and DNA template were determined. Sixty random primers were used to perform the amplification in a constant condition. The results of PCR amplification showed that the DNA template from egg, nymph, or adult of the same species gave a similar pattern. Whereas, the genetic similarity between *A. longispinosus* and *A. womersleyi* were very low either from rough (14.9%) or serious (8.3%) calculation. It implied that there was a great divergence between these 2 mites. Furthermore, the OPH-17 and OPH-18 primers were selected, they provided a clearly different pattern between *A. longispinosus* and *A. womersleyi*.  
AB. . . is a synonym of *A. longispinosus* since their identification character (dorsal setae L8) with intermediate length has been found. Random amplified polymorphic DNA (RAPD) was used to analysis the genetic diversity of these two morphologically similar mites. Genomic DNAs were extracted. . . from *A. longispinosus* or *A. womersleyi*, respectively. The optimal reaction condition including the buffer and DNA template were determined. Sixty random primers were used to perform the amplification in a constant condition. The results of PCR amplification showed that the DNA template from egg, nymph, or adult of the same species gave a similar pattern. Whereas, the . . .  
IT Methods & Equipment  
    RAPD analysis [random amplified polymorphic DNA analysis]:  
    molecular genetic method  
IT Miscellaneous Descriptors  
    genetic method; identification characters; optimal reaction conditions

L6 ANSWER 4 OF 13 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2000:14364 BIOSIS  
DN PREV200000014364

TI Highly specific recognition of primer RNA structures for 2'-OH priming reaction by bacterial reverse transcriptases.

AU Inouye, Sumiko; Hsu, Mei-Yin; Xu, Aiguo; Inouye, Masayori [Reprint author]  
CS Dept. of Biochemistry, Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ, 08854, USA

SO Journal of Biological Chemistry, (Oct. 29, 1999) Vol. 274, No. 44, pp. 31236-31244. print.  
CODEN: JBCHA3. ISSN: 0021-9258.

DT Article  
LA English  
ED Entered STN: 29 Dec 1999  
Last Updated on STN: 31 Dec 2001

AB A minor population of Escherichia coli contains retro-elements called retrons, which encode reverse transcriptases (RT) to synthesize peculiar satellite DNAs called multicopy single-stranded DNA (msDNA). These RTs recognize specific RNA structures in their individual primer-template RNAs to initiate cDNA synthesis from the 2'-OH group of a specific internal G residue (branching G residue). The resulting products (msDNA) consist of RNA and single-stranded DNA, sharing hardly any sequence homology. Here, we investigated how RT-Ec86 recognizes the specific RNA structure in its primer-template RNA. On the basis of structural comparison with HIV-1 RT, domain exchanges were carried out between two E. coli RTs, RT-Ec86 and RT-Ec73. RT-Ec86 (320 residues) and RT-Ec73 (316 residues) share only 71 identical residues (22%). From the analysis of 10 such constructs, the C-terminal 91-residue sequence of RT-Ec86 was found to be essential for the recognition of the unique stem-loop structure and the branching G residue in the primer-template RNA for retron-Ec86. Using the SELEX (systematic evolution of ligands by exponential enrichment) method with RT-Ec86 and primer RNAs containing random sequences, the identical stem-loop structure (including the 3-U loop) to that found in the retron-Ec86 primer-template RNA was enriched. In addition, the highly conserved 4-base sequence (UAGC), including the branching G residue, was also enriched. These results indicate that the highly diverse C-terminal region recognizes specific stem-loop structures and the branching G residue located upstream of the stem-loop structure. The present results with seemingly primitive RNA-dependent DNA polymerases provide insight into the mechanisms for specific protein RNA recognition.

AB . . . in the primer-template RNA for retron-Ec86. Using the SELEX (systematic evolution of ligands by exponential enrichment) method with RT-Ec86 and primer RNAs containing random sequences, the identical stem-loop structure (including the 3-U loop) to that found in the retron-Ec86 primer-template RNA was enriched. In addition, the highly . . .

IT Methods & Equipment  
PCR [polymerase chain reaction]: DNA amplification, amplification method, in-situ recombinant gene expression detection, sequencing techniques; affinity chromatography: liquid chromatography, purification method; binding assay: analytical method, binding assays; . . .

L6 ANSWER 5 OF 13 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2000:300179 BIOSIS  
DN PREV200000300179

TI Regeneration of diploid intergeneric somatic hybrid plants between Microcitrus and Citrus via electrofusion.

AU Liu Ji-Hong [Reprint author]; Hu Chun-Gen [Reprint author]; Deng Xiu-Xin [Reprint author]

CS National Key Laboratory of Crop Genetic Improvements, Huazhong Agricultural University, Wuhan, 430070, China

SO Acta Botanica Sinica, (Nov., 1999) Vol. 41, No. 11, pp. 1177-1182. print.

CODEN: CHWHAY. ISSN: 0577-7496.

DT Article  
LA Chinese  
ED Entered STN: 12 Jul 2000  
Last Updated on STN: 7 Jan 2002

AB Leaf-derived protoplasts of Rough lemon (*Citrus jambhiri* Lush,  $2n = 2x = 18$ ) were electrofused with embryogenic suspension protoplasts of its relative; *Microcitrus papuana* Swingle ( $2n = 2x = 18$ ), with an intention of creating novel germplasm. Six plants were regenerated following protoplasts fusion. Cytological examination demonstrated that they were diploids with 18 chromosomes ( $2n = 2x = 18$ ). RAPD (random amplified polymorphic DNA) analyses with six arbitrary 10-mer primers showed that the regenerated plants had identical band patterns to those of Rough lemon for primers OPA-07, OPAN-07, OPE-05 and OPA-08, whereas for the other two primers, OPA-04 and OPS-13, bands specific to *M. papuana* could be detected in the regenerated plants. Cytological and RAPD analysis revealed that the regenerated plants were diploid somatic hybrids between *M. papuana* and Rough lemon. The putative hybrids were morphologically similar to Rough lemon. This is the first report on production of diploid somatic hybrid plants between citrus with its related genus via symmetric fusion.

AB . . . regenerated following protoplasts fusion. Cytological examination demonstrated that they were diploids with 18 chromosomes ( $2n = 2x = 18$ ). RAPD (random amplified polymorphic DNA) analyses with six arbitrary 10-mer primers showed that the regenerated plants had identical band patterns to those of Rough lemon for primers OPA-07, OPAN-07, OPE-05 and OPA-08, whereas for the other two primers, . . .

L6 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3  
AN 1999:373846 CAPLUS  
DN 131:182227

TI Identification of *Fusarium oxysporum* f. sp. *basilici* isolated from soil, basil seed, and plants by RAPD analysis  
AU Chiocchetti, Annalisa; Ghignone, Stefano; Minuto, Andrea; Gullino, M. Lodovica; Garibaldi, Angelo; Migheli, Quirico  
CS Dipartimento di Protezione e Valorizzazione delle Risorse Agroforestali - Patologia vegetale, Universita di Torino, Grugliasco, I-10095, Italy  
SO Plant Disease (1999), 83(6), 576-581  
CODEN: PLDIDE; ISSN: 0191-2917  
PB American Phytopathological Society  
DT Journal  
LA English  
AB Fifty-two isolates of *Fusarium oxysporum*, obtained from infected basil plants, seed, flower residues, and soil from different growing areas in Italy and Israel, were analyzed by random amplified polymorphic DNA-polymerase chain reaction (RAPD-PCR), coupled to a DNA extraction protocol from colonies grown on *Fusarium*-selective medium. In a pathogenicity assay, 35 isolates caused 32 to 92% disease on seedlings of the highly susceptible basil cultivar *Fine verde*, while 17 isolates were nonpathogenic on basil. Thirty of the *F. oxysporum* f. sp. *basilici* isolates obtained from soil or wilted plants gave identical amplification patterns using 31 different random primers. All tested primers allowed clear differentiation of *F. oxysporum* f. sp. *basilici* from representatives of other *formae speciales* and from nonpathogenic strains of *F. oxysporum*. RAPD profiles obtained from DNA of isolates extracted directly from cultures grown on *Fusarium* selective medium were identical to those obtained from DNA extracted from lyophilized mycelia.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Fifty-two isolates of *Fusarium oxysporum*, obtained from infected basil plants, seed, flower residues, and soil from different growing areas in Italy and Israel, were analyzed by random amplified polymorphic

DNA-polymerase chain reaction (RAPD-PCR), coupled to a DNA extraction protocol from colonies grown on Fusarium-selective medium. In a pathogenicity assay, 35 isolates caused 32 to 92% disease on seedlings of the highly susceptible basil cultivar Fine verde, while 17 isolates were nonpathogenic on basil. Thirty of the *F. oxysporum* f. sp. *basilici* isolates obtained from soil or wilted plants gave identical amplification patterns using 31 different random primers. All tested primers allowed clear differentiation of *F. oxysporum* f. sp. *basilici* from representatives of other formae speciales and from nonpathogenic strains of *F. oxysporum*. RAPD profiles obtained from DNA of isolates extracted directly from cultures grown on Fusarium selective medium were identical to those obtained from DNA extracted from lyophilized mycelia.

L6 ANSWER 7 OF 13 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 1999:300063 BIOSIS  
DN PREV199900300063  
TI PCR fragmentation of DNA.  
AU Zheleznaya, L. A.; Kossykh, V. G.; Svad'bina, I. V.; Oshman, T. S.;  
Matvienko, N. I. [Reprint author]  
CS Institute of Protein Research, Russian Academy of Sciences, Pushchino,  
Moscow Region, 142292, Russia  
SO Biochemistry (Moscow), (April, 1999) Vol. 64, No. 4, pp. 447-453. print.  
CODEN: BIORAK. ISSN: 0006-2979.  
DT Article  
LA English  
ED Entered STN: 12 Aug 1999  
Last Updated on STN: 12 Aug 1999  
AB A method has been developed to prepare random DNA fragments using PCR. First, two cycles are carried out at 16degreeC with the Klenow's fragment and oligonucleotides (random primers) with random 3'-sequences and the 5'-constant part containing the site for cloning with the site-specific endonuclease. The random primers can link to any DNA site, and random DNA fragments are formed during DNA synthesis. During the second cycle, after denaturation of the DNA and addition of the Klenow's fragment, the random primers can link to newly synthesized DNA strands, and after DNA synthesis single-stranded DNA fragments are produced which have a constant primer sequence at the 5'-end and a complementary to it sequence at the 3'-end. During the third cycle, the constant primer is added and double-stranded fragments with the constant primer sequences at both ends are formed during DNA synthesis. Incubation for 1 h at 37degreeC degrades the oligonucleotides used at the first stage due to endonuclease activity of the Klenow's fragment. Then routine PCR amplification is carried out using the constant primer. This method is more advantageous than hydrodynamic methods of DNA fragmentation widely used for "shotgun" cloning.  
TI PCR fragmentation of DNA.  
AB A method has been developed to prepare random DNA fragments using PCR. First, two cycles are carried out at 16degreeC with the Klenow's fragment and oligonucleotides (random primers) with random 3'-sequences and the 5'-constant part containing the site for cloning with the site-specific endonuclease. The random primers can link to any DNA site, and . . . at 37degreeC degrades the oligonucleotides used at the first stage due to endonuclease activity of the Klenow's fragment. Then routine PCR amplification is carried out using the constant primer. This method is more advantageous than hydrodynamic methods of DNA fragmentation widely used.  
IT Methods & Equipment  
cloning: cloning method; PCR [polymerase chain reaction]:  
amplification method  
IT Miscellaneous Descriptors  
enzyme activity; DNA fragmentation

L6 ANSWER 8 OF 13 MEDLINE on STN  
AN 1999250446 MEDLINE  
DN PubMed ID: 10231588  
TI PCR fragmentation of DNA.  
AU Zheleznyaya L A; Kossykh V G; Svad'bina I V; Oshman T S; Matvienko N I  
CS Institute of Theoretical and Experimental Biophysics, Russian Academy of Sciences, Pushchino, Moscow Region, 142292, Russia.  
SO Biochemistry. Biokhimii a, (1999 Apr) Vol. 64, No. 4, pp. 373-8. *Usp*  
Journal code: 0376536. ISSN: 0006-2979.  
CY RUSSIA: Russian Federation  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199907  
ED Entered STN: 30 Jul 1999  
Last Updated on STN: 30 Jul 1999  
Entered Medline: 19 Jul 1999  
AB A method has been developed to prepare random DNA fragments using PCR. First, two cycles are carried out at 16 degrees C with the Klenow's fragment and oligonucleotides (random primers) with random 3'-sequences and the 5'-constant part containing the site for cloning with the site-specific endonuclease. The random primers can link to any DNA site, and random DNA fragments are formed during DNA synthesis. During the second cycle, after denaturation of the DNA and addition of the Klenow's fragment, the random primers can link to newly synthesized DNA strands, and after DNA synthesis single-stranded DNA fragments are produced which have a constant primer sequence at the 5'-end and a complementary to it sequence at the 3'-end. During the third cycle, the constant primer is added and double-stranded fragments with the constant primer sequences at both ends are formed during DNA synthesis. Incubation for 1 h at 37 degrees C degrades the oligonucleotides used at the first stage due to endonuclease activity of the Klenow's fragment. Then routine PCR amplification is carried out using the constant primer. This method is more advantageous than hydrodynamic methods of DNA fragmentation widely used for "shotgun" cloning.  
TI PCR fragmentation of DNA.  
AB A method has been developed to prepare random DNA fragments using PCR. First, two cycles are carried out at 16 degrees C with the Klenow's fragment and oligonucleotides (random primers) with random 3'-sequences and the 5'-constant part containing the site for cloning with the site-specific endonuclease. The random primers can link to any DNA site, and . . . degrees C degrades the oligonucleotides used at the first stage due to endonuclease activity of the Klenow's fragment. Then routine PCR amplification is carried out using the constant primer. This method is more advantageous than hydrodynamic methods of DNA fragmentation widely used. . .  
L6 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4  
AN 1998:534160 CAPLUS  
DN 129:273125  
TI Phylogenetic analysis of dipterocarps using random amplified polymorphic DNA markers  
AU Rath; Priyadarshini; Rajaseger, G.; Goh, Chong Jin; Kumar, Prakash P.  
CS School of Biological Sciences, The National University of Singapore, Singapore, 119260, Singapore  
SO Annals of Botany (London) (1998), 82(1), 61-65  
CODEN: ANBOA4; ISSN: 0305-7364  
PB Academic Press  
DT Journal  
LA English  
AB The phylogenetic relationships among 12 species belonging to three

different genera (*Shorea*, *Hopea* and *Anisoptera*) of Dipterocarpaceae were studied using random amplified polymorphic DNA (RAPD) markers. A modified CTAB DNA extraction protocol was used to obtain tannin- and polysaccharide-free genomic DNA from mature leaves. Cluster anal. of data from six random primers placed the 12 species in three groups corresponding to their resp. genera. Four distinct nodes of *Shorea* spp. and two of *Hopea* spp. could be identified. *Anisoptera megistocarpa* served as an outgroup, and was unique when compared to the other genera examined RAPD profiles of five individuals of *H. odorata* with six random primers were identical, suggesting that there is little intraspecific variation in this species. The RAPD technique can thus be successfully applied for the study of phylogenetic relationships of this important group of tropical timber trees. (c) 1998 Annals of Botany Company.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Phylogenetic analysis of dipterocarps using random amplified polymorphic DNA markers  
AB The phylogenetic relationships among 12 species belonging to three different genera (*Shorea*, *Hopea* and *Anisoptera*) of Dipterocarpaceae were studied using random amplified polymorphic DNA (RAPD) markers. A modified CTAB DNA extraction protocol was used to obtain tannin- and polysaccharide-free genomic DNA from mature leaves. Cluster anal. of data from six random primers placed the 12 species in three groups corresponding to their resp. genera. Four distinct nodes of *Shorea* spp. and two of *Hopea* spp. could be identified. *Anisoptera megistocarpa* served as an outgroup, and was unique when compared to the other genera examined RAPD profiles of five individuals of *H. odorata* with six random primers were identical, suggesting that there is little intraspecific variation in this species. The RAPD technique can thus be successfully applied for the study of phylogenetic relationships of this important group of tropical timber trees. (c) 1998 Annals of Botany Company.

L6 ANSWER 10 OF 13 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 1997:272024 BIOSIS  
DN PREV199799563742  
TI Absence of DNA polymorphisms in *Myzus persicae* (Homoptera: Aphididae) in relation to their host plants.  
AU Kim, H. J.; Boo, K. S.; Cho, K. H.  
CS Dep. Agric. Biol., Coll. Agric. and Life Sci., Seoul Natl. Univ., Seoul, South Korea  
SO Korean Journal of Applied Entomology, (1996) Vol. 35, No. 3, pp. 209-215.  
ISSN: 1225-0171.  
DT Article  
LA English  
ED Entered STN: 24 Jun 1997  
Last Updated on STN: 24 Jun 1997  
AB DNA polymorphisms were analyzed for 8 clones of the green Peach aphid, *Myzus persicae* Sulzer, by random amplified polymorphic DNA-polymerase chain reaction (RAPD-PCR). The insect has different host preferences and was even classified into two different species, *M. persicae* Sulzer and *Myzus nicotinae* Blackman by their morphological characters, but this point is still in argument. To identify the differences between two types of the green peach aphid by RAPD-PCR, the template DNA was extracted from 4 clones each of tobacco-feeding and non-tobacco-feeding forms and one hundred primers of 10-nucleotides-long were tested in PCR. The amplified DNAs were analyzed by agarose gel electrophoresis. Eighty-three primers gave amplified DNA fragments with 1 to 22 in number and 500 to 20,000 base pairs in length, but no amplification was observed in the other 17 primers. The average number of fragment per each amplification was about 13. In the case of 82 out of 83

random primers, band patterns of amplified DNA were identical among 8 clones, even though some differences were noticed in the intensity of specific bands. Polymorphism was detected by only one primer within the tobacco-feeding forms, but not between the two host types. The results did not detect any relationship between RAPD polymorphism and their host preference.

AB DNA polymorphisms were analyzed for 8 clones of the green Peach aphid, *Myzus persicae* Sulzer, by random amplified polymorphic DNA-polymerase chain reaction (RAPD-PCR). The insect has different host preferences and was even classified into two different species, *M. persicae* Sulzer and *Myzus nicotinae*. . . but this point is still in argument. To identify the differences between two types of the green peach aphid by RAPD-PCR, the template DNA was extracted from 4 clones each of tobacco-feeding and non-tobacco-feeding forms and one hundred primers of 10-nucleotides-long were tested in PCR. The amplified DNAs were analyzed by agarose gel electrophoresis. Eighty-three primers gave amplified DNA fragments with 1 to 22 in number and 500 to 20,000 base pairs in length, but no amplification was observed in the other 17 primers. The average number of fragment per each amplification was about 13. In the case of 82 out of 83 random primers, band patterns of amplified DNA were identical among 8 clones, even though some differences were noticed in the intensity of specific bands. Polymorphism was detected by only. . .

IT Miscellaneous Descriptors  
AGRICULTURAL PEST; DNA POLYMORPHISM; GENETIC METHOD; HOST; POPULATION GENETICS; RANDOM AMPLIFIED POLYMORPHIC DNA; TOBACCO-FEEDING FORM

L6 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5  
AN 1996:384556 CAPLUS  
DN 125:133818  
TI Application of PCR-amplified DNA to differentiate the Ganoderma isolates  
AU Hseu, Ruey-Shyang; Moncalvo, Jean-Marc; Wang, Huei-Fang; Wang, Hsi-Hua  
CS Department Agricultural Chemistry, National Taiwan University, Taipei, Taiwan  
SO Zhongguo Nongye Huaxue Huizhi (1996), 34(2), 129-143  
CODEN: CKNHAA; ISSN: 0578-1736  
PB Chinese Agricultural Chemical Society  
DT Journal  
LA English  
AB Polysaccharides are rich in cell walls of the Ganoderma species. These compds. have been considered as a potential source of the immunomodulatory factor. These polysaccharides interfere with several mol. and genetic techniques. This presentation describes mol. biol. methods in detail using the polymerase chain reaction (PCR), which enables identification and understanding of the differentiation of Ganoderma isolates. First, a method is described to isolate DNA from both mycelia and basidiocarps which removes most of the polysaccharides which may interfere with the PCR reaction. Then, a procedure is described for PCR amplification and cycle-sequencing of the internal transcribed spacer (ITS) region of the ribosomal gene (rDNA), which differentiates between Ganoderma species. Strains of the *G. tsugae* complex sharing an identical ITS sequence can be differentiated by random amplified polymorphic DNA (RAPD-PCR) produced with arbitrary primers. These procedures together with the oligonucleotide primers used in this work should also be appropriate for mol. identification of allied polypore fungi.  
TI Application of PCR-amplified DNA to differentiate the Ganoderma isolates  
AB Polysaccharides are rich in cell walls of the Ganoderma species. These compds. have been considered as a potential source of the immunomodulatory factor. These polysaccharides interfere with several mol. and genetic

techniques. This presentation describes mol. biol. methods in detail using the polymerase chain reaction (PCR), which enables identification and understanding of the differentiation of *Ganoderma* isolates. First, a method is described to isolate DNA from both mycelia and basidiocarps which removes most of the polysaccharides which may interfere with the PCR reaction. Then, a procedure is described for PCR amplification and cycle-sequencing of the internal transcribed spacer (ITS) region of the ribosomal gene (rDNA), which differentiates between *Ganoderma* species. Strains of the *G. tsugae* complex sharing an identical ITS sequence can be differentiated by random amplified polymorphic DNA (RAPD-PCR) produced with arbitrary primers. These procedures together with the oligonucleotide primers used in this work should also be appropriate for mol. identification of allied polypore fungi.

- ST *Ganoderma* identification PCR rRNA gene sequence
- IT *Amauroderma rude*  
*Fomitopsis rosea*  
*Ganoderma*  
*Ganoderma australe*  
*Ganoderma gibbosum*  
*Ganoderma lucidum*  
*Ganoderma tsugae*
- Polymerase chain reaction  
(application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT Gene, animal  
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)  
(for rRNA; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT Deoxyribonucleic acids  
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)  
(preparation of; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT Ribonucleic acids, ribosomal  
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)  
(25 S, gene for; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT Genetic element  
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)  
(ITS1 (internal transcribed spacer 1), gene for; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT Genetic element  
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)  
(ITS2 (internal transcribed spacer 2), gene for; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT 179467-61-9  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer 4.8 SR; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT 179467-62-0  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer 5.8S; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)
- IT 179467-60-8  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer BMB-CR; application of PCR-amplified DNA to differentiate the *Ganoderma* isolates)

IT 179467-64-2  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 15; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-63-1  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 1; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-65-3  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 21; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-66-4  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 3; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-67-5  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 5; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-68-6  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 6; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 168461-87-8  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR 7; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 168461-86-7  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer LR OR; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 149721-30-2  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer R1; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 149721-31-3  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer R2; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 182028-64-4  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer R3; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 149721-28-8  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer R4; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 147304-84-5  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer R5; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-58-4  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer SR 1R; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 179467-59-5  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(PCR primer SR 6; application of PCR-  
amplified DNA to differentiate the Ganoderma isolates)

IT 154946-07-3, GenBank X78791 154946-23-3, GenBank X78792 154946-24-4,  
GenBank X78789 154981-81-4, GenBank X78753 154981-82-5, GenBank X78774  
154981-85-8, GenBank X78754 154981-86-9, GenBank X78775 154981-87-0,  
GenBank X78780 154981-90-5, GenBank X78771 154981-96-1, GenBank X78741

154981-97-2, GenBank X78762 154981-98-3, GenBank X78743 154982-02-2,  
GenBank X78766 154982-03-3, GenBank X78776 154982-04-4, GenBank X78764  
154982-16-8, GenBank X78747 154982-17-9, GenBank X78768 154982-20-4,  
GenBank X78778 154982-21-5, GenBank Z37097 154982-22-6, GenBank X78767  
154982-23-7, GenBank X78748 154982-24-8, GenBank X78769 154982-33-9,  
GenBank X78750 157935-21-2, GenBank Z37021 157935-31-4, GenBank Z37073  
157935-48-3, GenBank Z37026 157935-49-4, GenBank Z37053 157935-51-8,  
GenBank Z37077 157935-52-9, GenBank Z37027 157935-53-0, GenBank Z37029  
157935-54-1, GenBank Z37030 157935-57-4, GenBank Z37055 157935-61-0,  
GenBank Z37078 157935-63-2, GenBank Z37080 160181-42-0, GenBank Z37096  
160493-43-6, GenBank Z37094 166356-89-4, GenBank X87362 166356-99-6,  
GenBank X87352

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);  
ANST (Analytical study); BIOL (Biological study)  
(nucleotide sequence; application of PCR-amplified  
DNA to differentiate the Ganoderma isolates)

L6 ANSWER 12 OF 13 MEDLINE on STN DUPLICATE 6  
AN 95403942 MEDLINE  
DN PubMed ID: 7673685  
TI Investigation of a nosocomial outbreak of Pseudomonas aeruginosa pneumonia  
in an intensive care unit by random amplification of polymorphic  
DNA assay.  
AU Kerr J R; Moore J E; Curran M D; Graham R; Webb C H; Lowry K G; Murphy P  
G; Wilson T S; Ferguson W P  
CS Department of Bacteriology, Belfast City Hospital, Northern Ireland.  
SO The Journal of hospital infection, (1995 Jun) Vol. 30, No. 2, pp. 125-31.  
Journal code: 8007166. ISSN: 0195-6701.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199510  
ED Entered STN: 26 Oct 1995  
Last Updated on STN: 26 Oct 1995  
Entered Medline: 19 Oct 1995  
AB From July to September 1993 in the intensive care unit of the Royal  
Victoria Hospital there were 10 cases of pneumonia associated with sputum  
culture of Pseudomonas aeruginosa. The isolates had an identical biotype  
and pyocine typing profile. The same strain of P. aeruginosa was  
recovered from the sink plug-hole in two rooms, and the tap handles and  
ventilator tubing in a third room. All strains were retrospectively typed  
by the random amplification of polymorphic DNA (RAPD)  
method using a 26-mer oligonucleotide primer, and were  
identical in profile. Recommendations to medical and nursing  
staff included secretion isolation precautions, terminal disinfection  
after patient discharge, use of disposable vinyl gloves by hospital staff  
for all body substance contacts, thorough handwashing with 4%  
chlorhexidine gluconate before and after dealing with all patient  
contacts, and prompt, appropriate antibiotic treatment for P. aeruginosa  
pneumonia. RAPD is a simple and effective method to determine the  
relatedness of P. aeruginosa isolates, and typing results are available  
within a single working day; thus dramatically increasing its clinical  
relevance over existing molecular methods.  
TI Investigation of a nosocomial outbreak of Pseudomonas aeruginosa pneumonia  
in an intensive care unit by random amplification of polymorphic  
DNA assay.  
AB . . . two rooms, and the tap handles and ventilator tubing in a third  
room. All strains were retrospectively typed by the random  
amplification of polymorphic DNA (RAPD) method using a 26-mer  
oligonucleotide primer, and were identical in profile.  
Recommendations to medical and nursing staff included secretion isolation  
precautions, terminal disinfection after patient discharge, use of  
disposable. . .

CT      Bacterial Typing Techniques  
\*Cross Infection: EP, epidemiology  
Cross Infection: MI, microbiology  
\*DNA, Bacterial: GE, genetics  
  \*Gene Amplification  
Humans  
Infection Control: MT, methods  
\*Intensive Care Units  
Northern Ireland: EP, epidemiology  
\*Pneumonia, Bacterial: EP, epidemiology  
Pneumonia, Bacterial: MI, . . .

L6      ANSWER 13 OF 13      MEDLINE on STN                          DUPLICATE 7  
AN      96108567      MEDLINE  
DN      PubMed ID: 8554698  
TI      Detection of T cell receptors in early rheumatoid arthritis synovial tissue.  
AU      Ramanujam T; Luchi M; Schumacher H R; Zwilllich S; Chang C P; Callegari P E; Von Feldt J M; Fang Q; Weiner D B; Williams W V  
CS      Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia 19104, USA.  
SO      Pathobiology : journal of immunopathology, molecular and cellular biology, (1995) Vol. 63, No. 2, pp. 100-8.  
Journal code: 9007504. ISSN: 1015-2008.  
CY      Switzerland  
DT      Journal; Article; (JOURNAL ARTICLE)  
LA      English  
FS      Priority Journals  
EM      199602  
ED      Entered STN: 12 Mar 1996  
Last Updated on STN: 12 Mar 1996  
Entered Medline: 23 Feb 1996  
AB      Synovial tissue is rarely available from patients with early synovitis, with the exception of synovial biopsies. However, T cell populations early in the development of synovitis may be enriched in antigen-specific cells and critical to disease pathogenesis. To investigate the T cell repertoire in early synovitis, we utilized a PCR protocol for detection of T cell receptor (TCR) transcripts present in small amounts of synovial tissue. To expand the substrate for PCR, preamplification of cDNA was performed with a 3' constant region primer plus either a mixture of variable region primers or random hexanucleotides. Utilizing this method improved the sensitivity of detection. This technique is applied here to the analysis of TCR transcripts in synovial biopsies from individuals with early rheumatoid arthritis (RA) and non-RA synovitis. TCR alpha-chain transcripts were detectable in 5/5 RA and 4/4 non-RA specimens evaluated, with beta-chain transcripts detected in 4/5 early RA and 4/4 non-RA specimens evaluated. Confirmation of transcripts by sequencing of cloned PCR products verified the specificity of amplification. The most frequently expressed TCR V region families in early RA synovitis were V alpha 11, V alpha 14, V alpha 28, V beta 7, V beta 9 and V beta 17. Several of these V regions have previously been implicated in studies of chronic RA synovitis. J alpha and J beta region usage was similar to that seen in chronic RA, and conserved N region motifs were apparent. We conclude that it is possible to detect TCR transcripts in small synovial biopsies from individuals with early arthritis. (ABSTRACT TRUNCATED AT 250 WORDS)  
AB      . . . in antigen-specific cells and critical to disease pathogenesis. To investigate the T cell repertoire in early synovitis, we utilized a PCR protocol for detection of T cell receptor (TCR) transcripts present in small amounts of synovial tissue. To expand the substrate for PCR, preamplification of cDNA was performed with a 3' constant region primer plus either a mixture of variable region primers or random hexanucleotides. Utilizing

this method improved the sensitivity of detection. This technique is applied here to the analysis of TCR transcripts. . . with beta-chain transcripts detected in 4/5 early RA and 4/4 non-RA specimens evaluated. Confirmation of transcripts by sequencing of cloned PCR products verified the specificity of amplification. The most frequently expressed TCR V region families in early RA synovitis were V alpha 11, V alpha 14, V . . .

=>